

REMARKS

Claims 1-66 are now pending in the application. Minor amendments have been made to the claims to simply overcome the rejections of the claims under 35 U.S.C. § 112. The amendments to the claims contained herein are intended to broaden the scope thereof and/or are equivalent scope as originally filed and, thus, are not a narrowing amendment. The Examiner is respectfully requested to reconsider and withdraw the rejections in view of the amendments and remarks contained herein.

ELECTION REQUIREMENT

A telephonic election requirement was made on May 3, 2007 between the following two groups of claims:

- I. Claims 1-34 and 44-66; and
- II. Claims 35-43.

Applicants respectfully traverse the election requirement and request reconsideration and withdrawal of the restriction requirement. Applicants make this request because the Applicants submit that the Examiner has not established a prima facie showing that the claimed inventions are independent and/or that there is a serious burden on the Examiner. The Examiner can only show the claimed inventions are independent by providing an appropriate explanation of separate classification, separate status in the art, or a different field of search as defined in MPEP § 808.02. The Groups were not distinguished when the telephonic requirement was made.

Further, this restriction requirement was made **after** a search and substantive Office Action was sent relating to **all** of the pending claims and **before** any response

from Applicants. The claims, therefore, are of the same scope as those filed, searched, and examined as they have not been amended. Thus, maintaining each of the claims in the present application would not be a serious burden.

PETITION DIRECTOR

If the restriction requirement is maintained and made final, Applicants preserve, through the traversal of the restriction by Applicants, the right to petition the Director to review the requirement now or may defer the petition until after final action or allowance of claims to the invention elected (37 C.F.R. § 1.144).

In view of the above, Applicants respectfully request reconsideration or modification of the requirement of Restriction election.

ELECTION WITH TRAVERSE

With traverse, however, Applicants elected, for initial Examination the claims of Group I (Claims 1-34 and 44-66). Applicants', however, do not withdraw any of the presently pending claims as Applicants submit that the restriction requirement is in error. Applicants do, however, reserve the right to file any unelected claims in later filed divisional patent applications. Applicants' further submit that at least claims 1, 22, 35, 44, 52, and 63 are generic, and if any of these claims are allowable then each of the presently pending claims are also allowable.

APPLICANT INITIATED INTERVIEW SUMMARY

Applicants would like to thank Examiner Michael Rozanski and Examiner Eleni Mantis-Mercader for the interview granted on May 3, 2007. During the interview, the independent claims were discussed in light of the cited art. Applicant's representative argued that the cited art did not include various elements of the presently pending claims. Applicants' representative believes an agreement was reached that at least Claims 22 and 35 should be allowable in light of the cited art. The Examiner stated that it was believed that an error was not made in providing a Restriction Requirement prior to the first Office Action and believes that restricting claims 35-43 from the present application was proper. Applicant's response to the restriction requirement is included above.

REJECTION UNDER 35 U.S.C. § 102 AND 103

Claims 1-4,6-8,10-17,20-24,26, 30-33,35-39,41-48,50-56,58-63,65 and 66 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Dumoulin et al. (U.S. Pat. No. 5,377,678). Claims 5, 34 and 64 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Dumoulin et al. in view of Melkent et al (U.S. Patent No. 6,725,080). Claims 9, 18, 25, 27-29, 40, 49, 57, 61 and 62 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Dumoulin et al. in view of Gilboa et al (US Patent No. 6,711,429.) These rejections are respectfully traversed.

Dumoulin et al., as discussed further herein, is directed to a tracking system that uses radio frequency fields. The radio frequency fields are produced by transmit coils that are driven initially by a master oscillator that generates a signal at a selected

frequency. See col. 3, lines 24-26 and 34 and Fig. 2A. Dumoulin et al. does not disclose a physiological sensor or gating system or a virtual image system.

Melkent et al. is directed to a system including a multiple cannula interconnected with a handle. Melkent et al., however, does not disclose or render apparent each of the elements of the presently pending independent claims, as noted in the Office Action.

Gilboa et al. is directed to a method for determining the location of a catheter in a body. Gilboa et al., however, fails to disclose or render obvious each of the elements of the presently pending claims, as noted in the Office Action.

Moreover, Applicants submit that the Office Action does not render apparent the combination of Dumoulin et al. with either Gilboa et al. or Melkent et al. Therefore, Applicants submit that such a combination is not proper.

As discussed above, Applicants thank the Examiner for the indication of allowability of Claims 22 and 35, in light of the cited art. Therefore, Applicants submit that Claims 22 and 35, and each of the claims that depend directly or indirectly therefrom are in condition for allowance.

Independent Claim 1 recites “an anatomical gating device operable to sense a physiological event; an imaging device operable to capture image data of the region of the patient in response to said physiological event . . . a controller in communication with said anatomical gating device . . . operable to register said image data with a region of the patient in response to said physiological event”. Independent Claim 44 recites “a method . . . identifying a physiological event; capturing the image data during the physiological event; registering the captured image data to the patient during the physiological event”. Independent Claim 63 recites “an anatomical gating device

operable to sense a physiological event; an imaging device operable to capture image data of the region of the patient; . . . a controller in communication with the anatomical gating device . . . operable to synchronize captured image data of the region of the patient in response to a physiological event”.

Contrary to the anatomical gating device or sensing a physiological event recited in the pending claims, the master oscillator 10 of Dumoulin et al. generates a signal at a selected frequency that is transmitted via the transmit coils. See Dumoulin et al. col. 3, lines 25-26. Dumoulin et al. explains this further when discussing a tracking system comprised of a RF transmitter 5 and a RF receiver 7, as illustrated in Fig. 2A thereof. See Dumoulin et al. col. 3, lines 20-21. The master oscillator 10 is illustrated within the transmitter portion of the tracking system and is disclosed only to generate a signal at a selected frequency which is propagated through a plurality of frequency offset means 20A, 20B, and 20N. See Dumoulin et al. col. 3, lines 26-27. The signal can be sent through a gating means that either sends the signal or blocks it. The signal can be amplified and used to drive the transmit coils. See Dumoulin et al. col. 30, lines 33-34. The signal can be received by the receiver coils 40a-40n and processed to determine a location. See Dumoulin et al. Col. 3, lines 38 –col. 4, line 5.

In light of the above, Dumoulin et al. discloses that the master oscillator 10 is used to create a frequency only within the tracking system, as illustrated in Fig. 2A of Dumoulin et al. Although the control computer is responsive to the timing signals of the master oscillator, the control computer is a part of the tracking computer 50. See Dumoulin et al. col. 4, lines 22-23 and 33-34. The control computer controls the transmit frequency offset means, gating means in the transmitter, transmit amplifiers,

and the receive frequency offset means. See Dumoulin et al. Fig. 2A. Dumoulin et al. describes that an x-ray imaging system can be used to obtain an image of the patient, but only that a superposition means 56 can overlay a symbol 152 on the video signal.

Dumoulin et al further describes that the tracking system can use various techniques, such as a timing technique, which uses the gating means in the transmitter. See col. 4, lines 48-56. Therefore, the gating and timing signal described in Dumoulin et al. relates to tracking the receiver 7 within the tracking system.

Dumoulin et al. fails to disclose or render apparent sensing or gating a physiological event. Therefore, Applicants respectfully submit that Dumoulin et al. does not disclose each of the elements of independent Claims 1, 44, and 63. The timing signal from the master oscillator is completely within the tracking system and is not disclosed to be relevant to any physiological event. Therefore, independent Claims 1, 44, and 63, and each of the claims that depend directly or indirectly therefrom, are in condition for allowance.

Independent Claim 52 recites "sensing a physiological parameter with the instrument". As agreed by the Examiner, the cited art does not teach or disclose independent Claim 22 which recites "at least one sensor attached to said instrument and operable to sense a physiological parameter". Moreover, as discussed above, the cited art does not teach or disclose sensing a physiological parameter. Therefore, independent Claim 52 and each of the claims that depend directly or indirectly therefrom are also in condition for allowance.

DOUBLE PATENTING

Claims 1-66 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-44 of copending Application No. 10/299,969.

Applicants request that this provisional rejection be held in abeyance until claims have been allowed in at least one of the present Application or U.S. Patent Application No. 10/299,969.

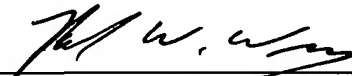
CONCLUSION

It is believed that all of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicant therefore respectfully requests that the Examiner reconsider and withdraw all presently outstanding rejections. It is believed that a full and complete response has been made to the outstanding Office Action and the present application is in condition for allowance. Thus, prompt and favorable consideration of this amendment is respectfully requested. If the Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at (248) 641-1600.

Respectfully submitted,

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